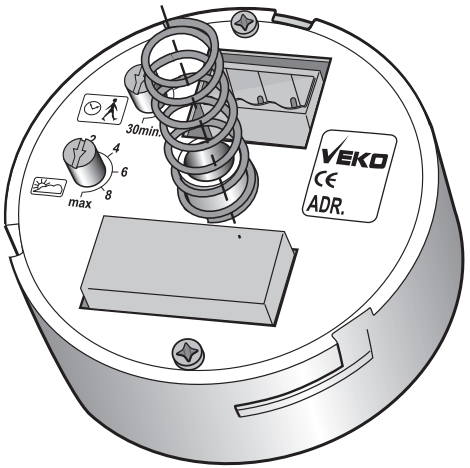


INSTALLATION AND USER'S MANUAL

Veko 2010
Schagen
Version 0

VEKO LIGHTSYSTEMS

INTRODUCTION

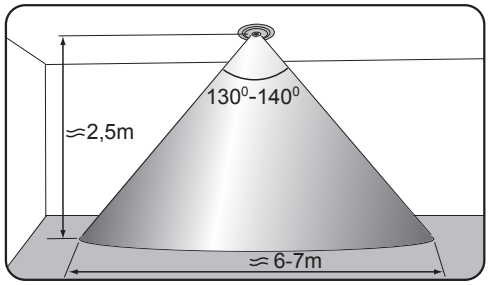
The ADR is a motion sensor system for turning on lights. Movement is detected using a pyroelectric infrared sensor (PIR).

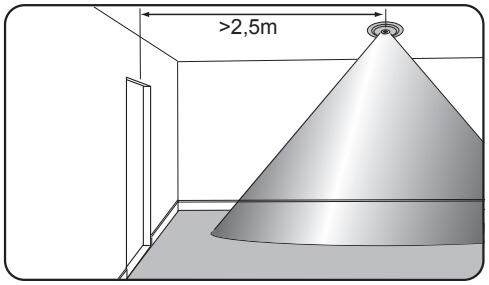
The PIR reacts to changes in temperature patterns. People and animals radiate heat. If they enter or move within the range of the ADR motion sensor, the heat patterns change within this range. The ADR detects this and interprets it as motion. It remains activated until the source of the heat leaves the area or stops moving.

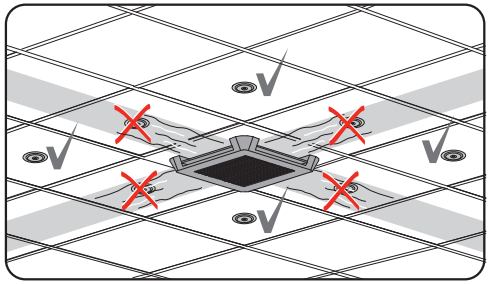
The ADR is designed so that it does not immediately switch off when it no longer senses any motion; it uses a so-called delay switch. The motion sensor has a timer, which resets each time it detects movement. When the timer runs out, the lights are switched off.

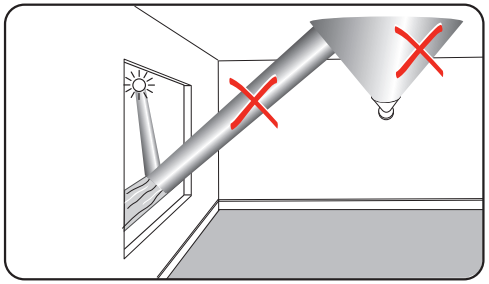
The ADR is equipped with a twilight switch, which enables the system not to switch on the lights if the amount of daylight exceeds a certain level. This level can be set using a potentiometer.

PLACEMENT









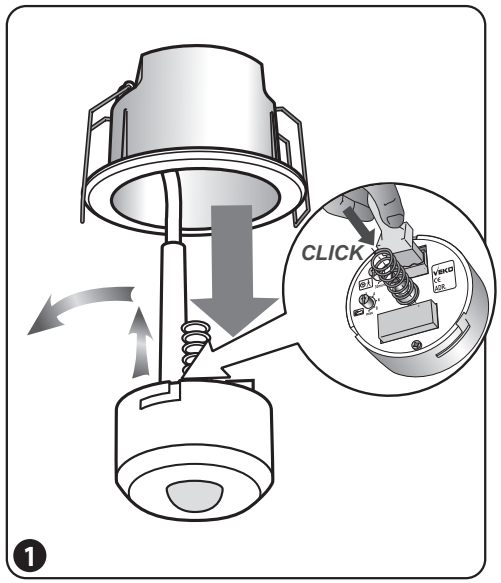
ADRs are suitable for mounting in ceilings and are available in both a recessed version (ADRI) and a surface mounted version (ADRO). Both have a detection angle of 130 to 140°. This equates to a diameter of 6 to 7 metres from a ceiling height of 2.5 metres. The optimal ceiling height is 2.5 to 3 metres. The higher the ceiling, the less sensitive the motion sensors will be.

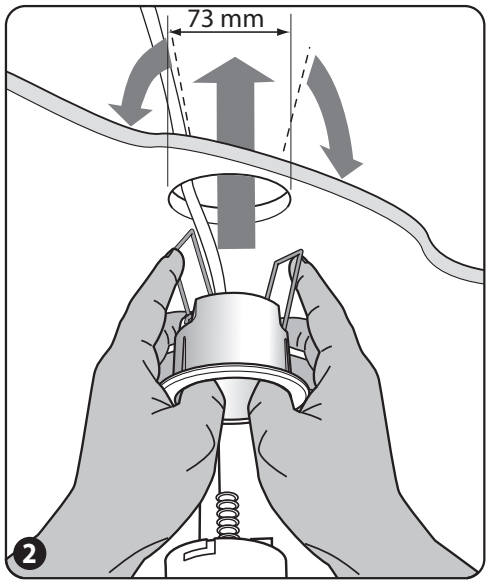
Caution! The sensitivity of the motion sensor deteriorates towards the outer edge of its range.

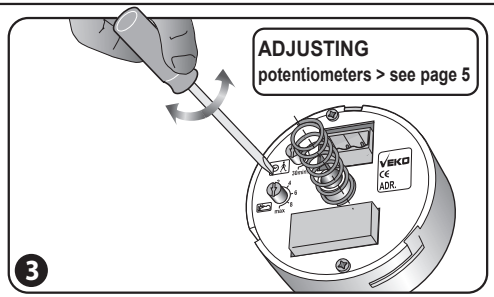
The ADR functions optimally in the centre of the room, taking into account the following factors that may have a negative effect on its operation:

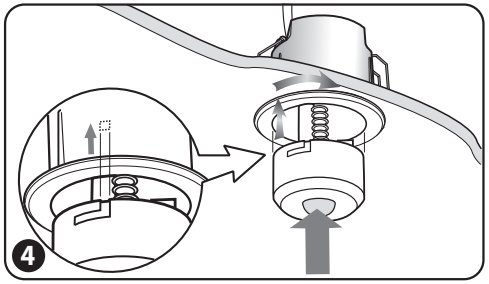
- Avoid direct air currents, e.g., from a heater or air conditioning unit;
- Avoid direct radiation from infrared sources, such as incandescent lamps and halogen bulbs and reflected sunlight (off water or reflective surfaces, for instance).
- Ideally the horizontal distance from the device to the entrance to the room should be at least 2.5 metres.

CEILING MOUNTING





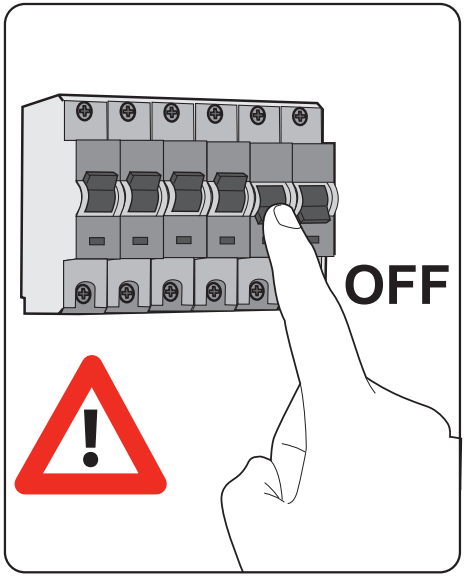


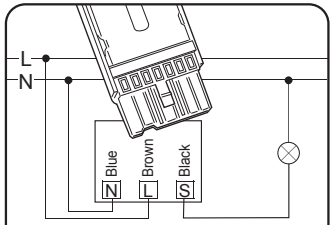


Remove the sensor unit from its casing. Check that the connector is properly mounted (it will 'click' when pushed). Cut a circle with a diameter of 73 mm in the ceiling. Push the springs up with both hands and guide the casing through the hole in the ceiling. Release the springs. If the ceiling is soft, put reinforcement under the spring. Put the detector into the ceiling ring. Turn to the right until the bayonet fitting locks.

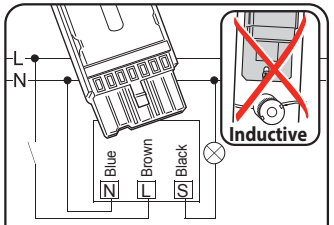
Potentiometers can be set before installation and can also be adjusted later to the desired setting.

CONNECTION

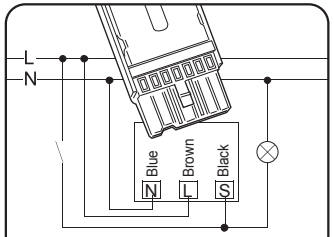




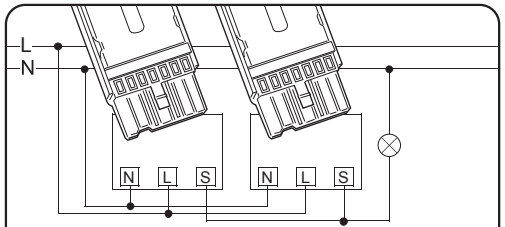
A Standard



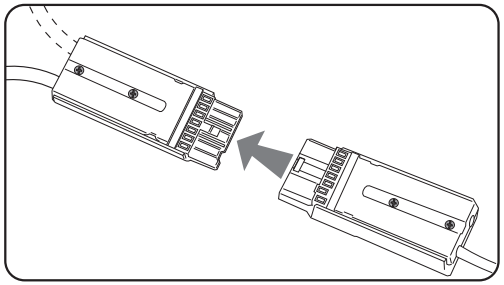
B IIndependent off switch



C Independent on switch



D Connecting several ADRs in parallel for large rooms.

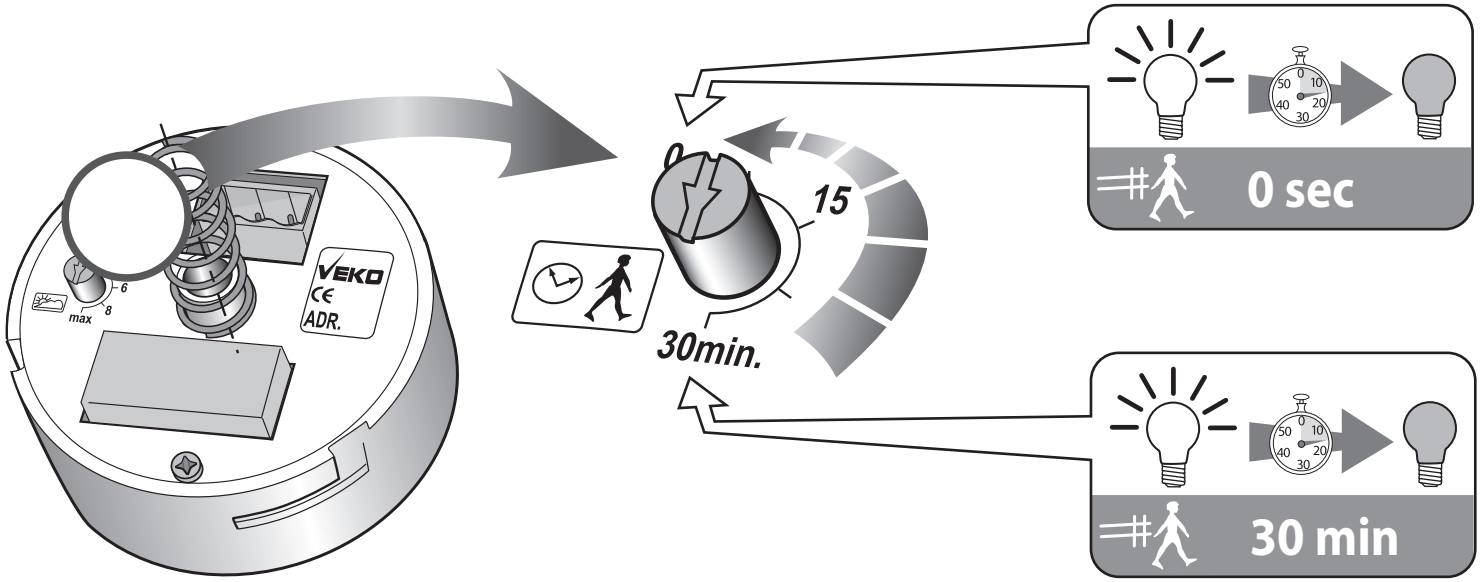


Before you connect the ADR, turn the mains off!

Standard connection: Connect phase (L) to the brown wire, the switch wire (S) to the black wire and neutral (N) to the blue wire.
The order of connections in Figures B and C is the same as in Figure A.
If the current to the ADR is switched on, the lighting will always be switched on.

Do not apply version B if inductive lighting is used, such as conventional pre-switching equipment.
Do not use 'cold start' switches if the ADR is likely to turn the lights on more than twice a day.

SETTINGS [1]

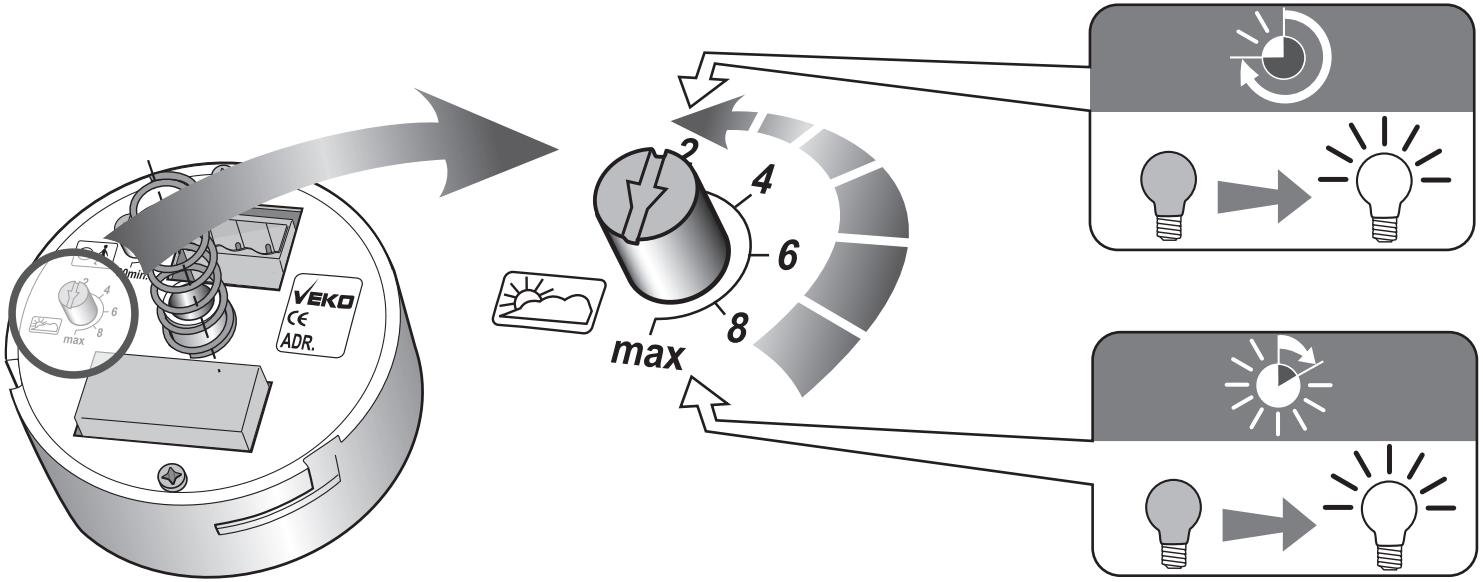


Delayed off switch
The ADR has a rheostat delay switch that can be adjusted using a potentiometer.
Only use the shortest delay setting (potentiometer fully to the left) to test the ADR and the installation.

Caution! Do not set the delay switch to less than 5 minutes for vapour lamps! Short switch times have a negative effect on the lifespan of these lamps because they are not given enough time to warm up.

Motion detection

SETTINGS [2]



Twilight switch
The ADR comes with a twilight switch. This ensures that the lighting is not turned on if there is sufficient daylight in the room.
If this is the case, and the daylight level drops below the set value while the room is still occupied, the lighting will turn on. If the lighting is on and the amount of daylight rises above the set value, the lighting will stay on. This prevents unnecessary switching on and off. Turn clockwise for higher twilight value and counter-clockwise for a lower twilight value. A higher twilight value means that more daylight is required to stop the lights from turning on. Adjust the potentiometer to 'max' to turn the twilight switch off altogether.

Onset of twilight

Page 6

SAFETY

Before you connect the ADR, the current must be turned off.

Only certified electricians are permitted to work on 230V current.

All installation instructions must be followed.

If in doubt, consult VEKO lightsystems technical service department.

Ensure that the wires are connected according to the colour coding.

Comply fully with the technical specifications of the equipment.

Do not use 'cold start' switches if the ADR is likely to switch on the lighting more than twice in a 24-hour period.

The ADR is not certified for use as an alarm system.

TROUBLESHOOTING

Fault	Possible cause	Solution
Lighting is not switching on	No current	▮ check mains
	Twilight value not yet reached	▮ adjust settings
	Bulb defective	▮ replace
Lighting is switching on unnecessarily	Switches on after loss of current	▮ wait
	Sudden change in heat patterns (e.g., printer, fan, air conditioning etc.) within detection range	▮ choose a better site ▮ lower sensitivity
Lighting is switching off unnecessarily	No detection within set delay time	▮ choose longer delay
	Person is outside detection range	▮ choose a better site ▮ use more detectors ▮ set the delay to longer
	The detector is higher than 3 metres	▮ use more detectors ▮ choose longer delay ▮ mount the detector lower
	No current	▮ reset mains
Lighting on permanently	Switch is overridden by installation switch	▮ turn switch off
	Heat patterns within detection range are constantly changing	▮ choose a better site
Lighting is not switching off when there is sufficient daylight	Never switches off with sufficient daylight	▮ leave the room and wait until the delay switch time passes

TECHNICAL SPECIFICATIONS

Nominal voltage:	**230 V ~ ± 10%, 50 Hz**
Maximum continuous power:	**6 A at cos φ = 1** **[2 A at cos φ = 0,4]**
Usage (switched on/off):	**< 0,5 W / < 4 W**
PIR detection angle:	**All round 130° - 140°**
Switched off time delay:	**5 sec.- 30 min.** **[motion]**
Ambient temperature:	**0-40 °C**
Appliance class:	**IP20**

CE

Rev.0 December 2010

VEKO LIGHTSYSTEMS